**1.5**

**Dividing Polynomials, Synthetic Division & The Remainder Theorem**

**(A.APR.2)**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_

**Divide *f(x)* by *d(x)* using long division*,* and write a summary statement in polynomial form and fraction form.**

**Show all work!**



**Divide using synthetic division, and write a summary statement in fraction form. Show all work!**



**Use the Remainder Theorem to find the remainder when *f(x)* is divided by *x – k*. Show all work!**



**Use the Factor Theorem to determine whether the first polynomial is a factor of the second polynomial.**

**Show all work!**



**Determine whether each binomial is a factor of** **. Show all work!**



**Divide using any method.**

